

Business Situation

Advance Estimates for the First Quarter of 2003

ACCORDING to the “advance” estimates of the national income and product accounts (NIPA’s), U.S. production continued to grow slowly in the first quarter of 2003, growth of disposable income decelerated, and inflation stepped up.

- Real gross domestic product (GDP) increased 1.6 percent in the first quarter after increasing 1.4 percent in the fourth quarter of 2002 (table 1 and chart 1).¹ Since growth resumed in the fourth quarter of 2001, after three negative quarters, growth has averaged 2.7 percent; during the expansion of the 1990s, it averaged 3.5 percent.
- Gross domestic purchases slowed to a 0.7-percent increase after increasing 2.9 percent.

1. Quarterly estimates in the NIPA’s are expressed at seasonally adjusted annual rates, unless otherwise specified. Quarter-to-quarter dollar changes are differences between these published estimates. Percent changes are calculated from unrounded data and annualized. “Real” estimates are in chained (1996) dollars, and price indexes are chain-type measures.

This article was prepared by Daniel Larkins.

- Real disposable personal income slowed to a 1.1-percent increase after increasing 2.4 percent.
- The price index for gross domestic purchases rose 3.6 percent after rising 1.8 percent. Most of the step-up reflected a jump in energy prices.

More than half of the first-quarter growth in real GDP was accounted for by a small rise in consumer spending (table 2).² Consumer purchases of services posted its smallest increase in 12 years; electricity consumption decreased after a fourth-quarter spurt that had been brought on by much lower-than-normal temperatures. Consumer purchases of autos and trucks decreased in the first quarter but substantially less than in the fourth.

Federal Government spending increased 2.6 percent, its smallest increase in a year and a half, and

2. In this article, “consumer spending” is shorthand for the NIPA series “personal consumption expenditures,” “government spending” is shorthand for “government consumption expenditures and gross investment,” and “inventory accumulation” is shorthand for “change in private inventories.”

Table 1. Real Gross Domestic Product, Real Gross Domestic Purchases, and Real Final Sales to Domestic Purchasers

[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter							
	2003	2002				2002			
	I	II	III	IV	I	II	III	IV	I
Gross domestic product	9,556.0	29.2	93.2	32.6	37.8	1.3	4.0	1.4	1.6
Less: Exports of goods and services	1,053.0	34.9	12.2	-16.1	-8.6	14.3	4.6	-5.8	-3.2
Plus: Imports of goods and services	1,561.3	75.8	12.8	28.1	-32.5	22.2	3.3	7.4	-7.9
Equals: Gross domestic purchases	10,023.0	62.6	93.9	70.8	17.5	2.6	3.9	2.9	0.7
Less: Change in private inventories	12.8	33.8	13.9	7.0	-13.0
Equals: Final sales to domestic purchasers	9,998.8	31.6	80.1	64.0	28.7	1.3	3.3	2.6	1.2
Personal consumption expenditures	6,660.5	28.6	67.5	28.0	22.6	1.8	4.2	1.7	1.4
Durable goods	1,007.7	4.8	51.7	-21.8	-2.9	2.0	22.8	-8.2	-1.1
Nondurable goods	1,969.9	-0.5	4.9	24.2	19.9	-0.1	1.0	5.1	4.2
Services	3,711.8	24.0	20.8	20.0	4.8	2.7	2.3	2.2	0.5
Private fixed investment	1,590.6	-3.8	-1.0	16.9	2.1	-1.0	-0.3	4.4	0.5
Nonresidential	1,172.7	-7.3	-2.4	6.6	-12.6	-2.4	-0.8	2.3	-4.2
Structures	210.7	-11.5	-13.5	-5.6	-1.9	-17.6	-21.4	-9.9	-3.4
Equipment and software	980.9	7.7	15.8	14.9	-11.2	3.3	6.7	6.2	-4.4
Residential	407.3	2.5	1.0	8.8	11.4	2.7	1.1	9.4	12.0
Government consumption expenditures and gross investment	1,738.8	6.0	12.3	19.4	3.8	1.4	2.9	4.6	0.9
Federal	635.5	10.9	6.4	16.3	4.1	7.5	4.3	11.0	2.6
National defense	411.6	7.3	6.7	10.7	-1.6	7.8	6.9	11.0	-1.5
Nonddefense	223.9	3.6	-0.2	5.6	5.6	6.9	-0.3	11.1	10.5
State and local	1,103.8	-4.6	5.9	3.4	-0.2	-1.7	2.2	1.2	-0.1
Addendum: Final sales of domestic product	9,532.1	-1.5	79.3	25.9	49.0	-0.1	3.4	1.1	2.1

NOTE: Chained (1996) dollar series are calculated as the product of the chain-type quantity index and the 1996 current-dollar value of the corresponding series, divided by 100. Because the formula for the chain-type quantity indexes uses weights of more than one period, the corresponding chained-dollar estimates usually are not additive. Chained (1996) dollar levels and residuals, which measure the extent of nonadditivity in each table, are

shown in NIPA tables 1.2, 1.4, and 1.6. Percent changes are calculated from unrounded data. Percent changes in major aggregates are shown in NIPA table S.1. (See “Selected NIPA Tables,” which begins on page D-2 in this issue.)

contributed 0.18 percentage point to GDP growth. The first-quarter estimate reflected the military buildup in the Persian Gulf Region and the first few days of military action in Operation Iraqi Freedom, which began on March 19, 2003. Despite these developments, defense spending decreased; spending on munitions is included in GDP when the munitions are produced and delivered to the military, not when they are used. However, several categories of defense spending did increase in the first quarter:

- Real compensation of military personnel increased \$2.9 billion (annual rate), partly reflecting the activation of an additional 163,000 reservists,

- A \$4.4 billion increase in “transportation of material” was more than accounted for by the shipment of equipment and supplies in connection with operations in Iraq, and
- A \$0.6 billion increase in “travel of persons” was more than accounted for by transportation of troops and support personnel in connection with operations in Iraq.

Residential investment increased more than in the fourth quarter. The increase (the fifth in a row) contributed 0.53 percentage point to GDP growth.

Imports of goods and services, which are subtracted in the calculation of GDP, turned down; the modest

Chart 1. Selected Measures: Change From Preceding Quarter

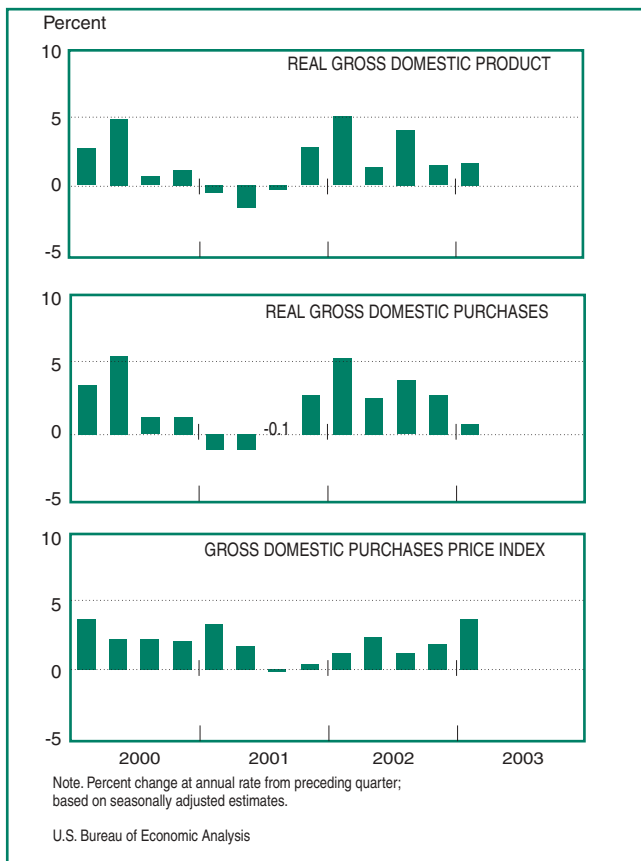


Table 2. Contributions to Percent Change in Real Gross Domestic Product

[Seasonally adjusted at annual rates]

	2002			2003
	II	III	IV	I
Percent change at annual rate:				
Gross domestic product	1.3	4.0	1.4	1.6
Percentage points at annual rates:				
Personal consumption expenditures	1.22	2.93	1.19	0.97
Durable goods	0.16	1.74	-0.72	-0.09
Nondurable goods	-0.02	0.22	1.01	0.84
Services	1.08	0.97	0.90	0.22
Gross private domestic investment	1.16	0.55	0.93	-0.39
Fixed investment	-0.15	-0.03	0.65	0.08
Nonresidential	-0.27	-0.08	0.24	-0.45
Structures	-0.53	-0.62	-0.25	-0.08
Equipment and software	0.26	0.53	0.49	-0.37
Residential	0.12	0.05	0.41	0.53
Change in private inventories	1.31	0.58	0.28	-0.48
Net exports of goods and services	-1.40	-0.01	-1.59	0.86
Exports	1.29	0.45	-0.59	-0.31
Goods	0.99	0.28	-0.82	-0.17
Services	0.30	0.17	0.23	-0.14
Imports	-2.69	-0.47	-1.00	1.17
Goods	-2.74	-0.40	-0.71	1.00
Services	0.05	-0.07	-0.30	0.17
Government consumption expenditures and gross investment	0.27	0.56	0.85	0.17
Federal	0.47	0.29	0.70	0.18
National defense	0.32	0.29	0.46	-0.07
Nondefense	0.16	-0.01	0.25	0.24
State and local	-0.21	0.27	0.15	-0.01

NOTE. More detailed contributions to percent change in real gross domestic product are shown in NIPA table 8.2. Contributions to percent change in major components of real gross domestic product are shown in tables 8.3 through 8.6.

First-Quarter 2003 Advance NIPA Estimates: Source Data and Assumptions

The "advance" estimate for the first quarter is based on the following major source data; as more and better data become available, the estimates will be revised. (The number of months for which data were available is shown in parentheses.)

Personal consumption expenditures: Sales of retail stores (3), unit auto and truck sales (3), and consumers' shares of auto and truck sales (2);

Nonresidential fixed investment: Unit auto and truck sales (3), construction put in place (2), manufacturers' shipments of machinery and equipment other than aircraft (3), shipments of civilian aircraft (2), and exports and imports of machinery and equipment (2);

Residential investment: Construction put in place (2), single-family housing starts (3), sales of new houses (2), and sales of existing houses (2);

Change in private inventories: Trade and nondurable manufacturing inventories (2), durable manufacturing inventories other than semiconductors (3), and unit auto and truck inventories (3);

Net exports of goods and services: Exports and imports of goods and services (2);

Government consumption expenditures and gross investment: Some Federal outlays were available for 2 months, others for 3, State and local construction put in place (2), and State and local employment (3);

GDP prices: Consumer price indexes (3), producer price indexes (3), U.S. import and export price indexes (3), and values and quantities of petroleum imports (2).

BEA made assumptions for source data that were not available. Table A shows the assumptions for key series; a more comprehensive list is available on BEA's Web site at <www.bea.gov>.

Table A. Summary of Major Data Assumptions for Advance Estimates, 2003:1

[Billions of dollars, seasonally adjusted at annual rates]

	2002			2003		
	October	November	December	January	February	March ¹
Private fixed investment:						
Nonresidential structures:						
Buildings:						
Value of new nonresidential construction put in place.....	160.2	161.8	155.6	158.3	158.8	158.5
Equipment and software:						
Manufacturers' shipments of complete aircraft.....	32.2	31.1	26.6	24.3	33.4	28.8
Residential structures:						
Value of new residential construction put in place:						
1-unit structures	267.9	273.4	282.0	291.7	291.3	294.1
2-unit-or-more.....	31.9	31.4	32.7	35.6	36.8	37.2
Change in private inventories:						
Change in inventories for nondurable manufacturing	2.0	-3.6	-0.3	9.4	21.6	13.1
Change in inventories for merchant wholesale and retail industries other than motor vehicles and equipment	-31.0	18.0	60.8	-0.9	22.7	23.6
Net exports: ²						
Exports of goods:						
U.S. exports of goods, international-transactions-accounts basis.....	687.3	694.1	664.5	681.5	688.9	680.8
Excluding gold.....	683.8	690.2	660.4	677.1	685.1	677.2
Imports of goods:						
U.S. imports of goods, international-transactions-accounts basis.....	1,162.7	1,225.4	1,246.6	1,221.0	1,219.6	1,244.5
Excluding gold.....	1,159.0	1,222.5	1,244.4	1,218.6	1,217.0	1,242.1
Net exports of goods	-475.4	-531.3	-582.1	-539.6	-530.7	-563.6
Excluding gold	-475.2	-532.2	-584.0	-541.5	-531.8	-564.8
Government:						
State and local:						
Structures:						
Value of new construction put in place	186.3	189.9	189.1	192.4	186.1	189.3

1. Assumption.

2. Nonmonetary gold is included in balance-of-payments-basis exports and imports but is not used directly in the estimation of NIPA exports and imports.

growth in gross domestic purchases was satisfied by higher domestic production. Exports of goods and services decreased for the second quarter in a row.

Nonresidential investment was a drag on growth in the first quarter:

- The pace of inventory accumulation slowed, subtracting 0.48 percentage point from GDP growth. In the fourth quarter, an increase in inventory accumulation had added 0.28 percentage point to the growth rate.
- Nonresidential fixed investment decreased again—its ninth drop in 10 quarters—and subtracted 0.45 percentage point from GDP growth. Both structures and equipment and software declined. The decline in equipment was mainly accounted for by motor vehicles; in contrast, information processing equipment increased substantially more than in the fourth quarter.

The advance estimates for the first quarter also show the following:

- Real final sales of domestic product, GDP less the change in private inventories, increased 2.1 percent after increasing 1.1 percent.
- Production of goods increased modestly after decreasing, and construction posted its biggest increase in a year (table 3). In contrast, the production of services posted its smallest increase in almost 7 years.
- Real motor vehicle output decreased 3.0 percent after decreasing 13.4 percent. GDP less motor vehicle output increased 1.8 percent, about the same as in the fourth quarter.
- Real final sales of computers increased 18.0 percent after increasing 26.7 percent.
- The personal saving rate edged down to 3.7 percent from 3.8 percent.³

3. The personal saving rate is measured as personal saving as a percentage of current-dollar disposable personal income. An estimate of the *national* saving rate (which is measured as gross saving as a percentage of gross national product) will be available at the end of May along with the “preliminary” estimates of the NIPAs for the first quarter.

Table 3. Real Gross Domestic Product by Type of Product

[Seasonally adjusted at annual rates]

	Billions of chained (1996) dollars					Percent change from preceding quarter			
	Level	Change from preceding quarter							
	2003	2002			2003	2002			2003
	I	II	III	IV	I	II	III	IV	I
Gross domestic product.....	9,556.0	29.2	93.2	32.6	37.8	1.3	4.0	1.4	1.6
Goods	3,760.4	3.6	80.4	-14.7	20.3	0.4	9.0	-1.6	2.2
Services	5,024.0	42.3	30.9	38.2	9.4	3.5	2.5	3.1	0.8
Structures	777.6	-17.2	-10.9	4.8	8.8	-8.4	-5.5	2.5	4.6
Addenda:									
Motor vehicle output.....	359.7	6.7	28.5	-13.3	-2.7	8.1	37.1	-13.4	-3.0
Gross domestic product less motor vehicle output	9,197.7	23.3	67.9	44.0	39.9	1.0	3.0	1.9	1.8
Final sales of computers.....						13.1	78.5	26.7	18.0
Gross domestic product less final sales of computers.....						1.2	3.6	1.2	1.5

NOTE. See note to table 1 for an explanation of chained (1996) dollar series. Chained (1996) dollar levels and residuals for most items are shown in NIPA table 1.4. Detail on motor vehicle output is shown in NIPA table 8.9B.

Prices

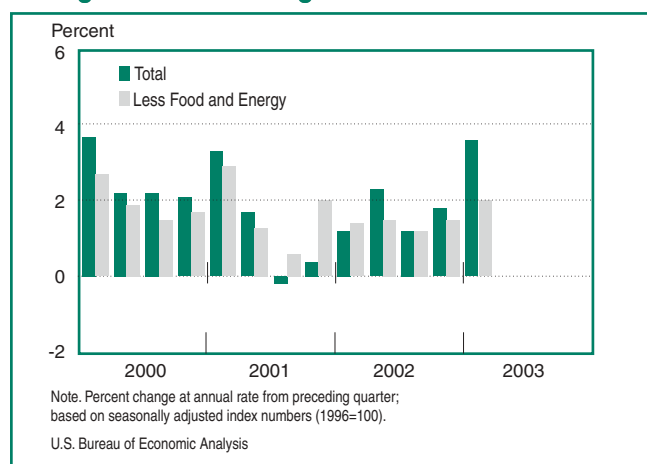
Inflation stepped up in the first quarter. Prices of goods and services purchased by U.S. residents increased 3.6 percent after increasing 1.8 percent (table 4). About three-fourths of the step-up was accounted for by energy prices; excluding food and energy items, prices increased 2.0 percent after increasing 1.5 percent (chart 2). In addition, a Federal pay raise for military and civilian personnel added about 0.3 percentage point to the first-quarter increase.⁴

Prices of goods and services purchased by consumers increased 2.8 percent, a percentage point more than in the fourth quarter. The step-up was more than accounted for by the acceleration in energy prices; prices of consumer purchases other than food and energy slowed to a 0.9-percent increase from a 1.5-percent increase. The acceleration in energy prices was spread across the various categories of energy, but gasoline and fuel oil contributed the most. Food prices increased about the same as in the fourth quarter.

Prices paid by government rose 7.8 percent—the biggest increase since 1984—after increasing 1.6 percent. The Federal pay raise accounted for most of the acceleration. The jump in energy prices boosted prices

4. In the NIPA's, an increase in the rate of Federal employee compensation is treated as an increase in the price of employee services purchased by the Federal Government.

Chart 2. Gross Domestic Purchases Prices: Change From Preceding Quarter



at the Federal and at the State and local levels.

Prices of private nonresidential fixed investment posted a second straight modest quarterly increase after five consecutive decreases. As in the fourth quarter, an increase in the price of structures more than offset a small decrease in the price of equipment and software; the decrease in equipment prices was accounted for by computers and peripherals. Prices of transportation equipment increased moderately after a sharp increase.

The GDP price index, which measures the prices paid for goods and services produced in the United States, increased 2.5 percent after increasing 1.8 percent. This index increased less than the price index for gross domestic purchases because export prices increased less than import prices. The rise in import prices was dominated by soaring petroleum prices.

Table 4. Price Indexes

[Percent change at annual rates; based on seasonally adjusted index numbers (1996=100)]

	2002			2003
	II	III	IV	I
Gross domestic product	1.2	1.0	1.8	2.5
Less: Exports of goods and services.....	3.0	3.5	0.9	3.5
Plus: Imports of goods and services.....	11.1	4.4	0.9	11.6
Equals: Gross domestic purchases	2.3	1.2	1.8	3.6
Less: Change in private inventories.....
Equals: Final sales to domestic purchasers	2.3	1.3	1.8	3.7
Personal consumption expenditures.....	2.7	1.7	1.8	2.8
Durable goods.....	-2.9	-1.9	-2.2	-3.7
Nondurable goods.....	4.6	0.6	1.2	4.6
Services.....	3.0	3.0	3.0	3.3
Private fixed investment.....	-0.2	-0.9	1.8	2.8
Nonresidential.....	-1.4	-1.3	0.4	0.7
Structures.....	0.7	0.4	2.3	4.2
Equipment and software.....	-2.1	-1.9	-0.2	-0.3
Residential.....	2.6	0	5.0	7.6
Government consumption expenditures and gross investment.....	2.8	1.4	1.6	7.8
Federal.....	2.3	1.3	0.3	9.8
National defense.....	2.0	1.5	1.2	9.1
Nondefense.....	2.9	1.0	-1.2	10.9
State and local.....	3.1	1.5	2.2	6.7
Addenda:				
Gross domestic purchases:				
Food.....	0.4	0.7	1.8	1.7
Energy.....	29.9	3.8	8.8	53.0
Less food and energy.....	1.5	1.2	1.5	2.0
Personal consumption expenditures:				
Food.....	0.5	0.9	1.8	1.6
Energy goods and services ¹	29.6	3.3	7.6	46.4
Less food and energy.....	1.9	1.8	1.5	0.9

1. Consists of gasoline, fuel oil, and other energy goods and of electricity and gas.

Note. Percent changes in major aggregates are shown in NIPA table 8.1. Index numbers are shown in tables 7.1, 7.2, and 7.4.

Personal Income

The growth of personal income stepped up a little in the first quarter, but the growth of disposable personal income slowed a little. The difference between the two movements reflected an upswing in tax payments.

Personal income, which is measured only in current dollars, increased \$87.9 billion (or 3.9 percent) after increasing \$81.0 billion (3.7 percent) (table 5). The slight acceleration reflected

- A step-up in wage and salary disbursements by government, mainly accounted for by the pay raise for Federal personnel, and
- A smaller decrease in rental income of persons than in the fourth quarter, as closing costs associated with mortgage refinancings decelerated. (Expenses, such as closing costs, are subtracted in the calculation of rental income.)

The effect of these developments on personal income was partly offset by a downturn in personal in-

terest income that reflected a decrease in interest rates. Personal income growth was also damped by a deceleration in "other labor income" and by a step-up in personal contributions for social insurance. The step-up in contributions reflected

- An increase in the social security taxable wage base for employees and the self-employed (from \$84,900 to \$87,000), and
- An increase in the premium for supplementary medical insurance (Medicare B).

The upswing in personal tax and nontax payments reflected the step-up in wage and salary disbursements. The tax estimate also reflects underlying detail from the Federal Budget that indicates an upturn in withheld income tax collections in 2003.

Current-dollar disposable personal income (DPI) slowed to a 3.9-percent increase in the first quarter after increasing 4.3 percent in the fourth. Reflecting the set-up in inflation, real DPI slowed more—to a 1.1 percent increase from a 2.4-percent increase (chart 3).

Table 5. Personal Income and Its Disposition

[Billions of dollars; seasonally adjusted at annual rates]

	Level	Change from preceding quarter				
	2003	2002				2003
	I	II	III	IV	I	
Wage and salary disbursements.....	5,104.9	39.5	10.1	45.0	52.5	
Private industries.....	4,224.2	31.5	1.4	36.7	37.2	
Goods-producing industries.....	1,120.8	4.4	-6.1	1.8	3.8	
Manufacturing.....	758.3	5.9	-7.4	-1.0	1.4	
Distributive industries.....	1,129.4	5.2	2.5	9.8	1.8	
Service industries.....	1,974.0	22.0	4.9	25.1	31.6	
Government.....	880.7	8.0	8.7	8.3	15.3	
Other labor income.....	639.1	13.3	13.4	12.7	8.9	
Proprietors' income with IVA and CCAAdj.....	785.8	-0.9	11.2	12.9	14.2	
Farm.....	14.4	-14.2	3.2	1.0	2.7	
Nonfarm.....	771.4	13.3	8.0	11.9	11.5	
Rental income of persons with CCAAdj.....	126.1	12.2	-9.4	-13.5	-4.5	
Personal dividend income.....	451.2	6.6	7.0	6.5	7.4	
Personal interest income.....	1,074.5	12.4	-1.6	0.2	-6.4	
Transfer payments to persons.....	1,341.4	30.6	15.8	20.7	22.3	
Less: Personal contributions for social insurance.....	395.2	3.1	1.7	3.4	6.5	
Personal income.....	9,127.8	110.6	44.9	81.0	87.9	
Less: Personal tax and nontax payments.....	1,108.2	-15.0	-22.8	-2.2	11.4	
Equals: Disposable personal income.....	8,019.6	125.5	67.7	83.3	76.4	
Less: Personal outlays.....	7,722.1	81.6	105.1	57.7	81.4	
Equals: Personal saving.....	297.5	43.9	-37.4	25.6	-5.0	
Addenda: Special factors in personal income:						
In government wages and salaries:						
Federal pay raise.....	6.3	0.0	0.0	0.0	6.3	
Reservists' pay.....	5.6	0.3	-0.2	-1.0	3.3	
In transfer payments to persons:						
Social security retroactive payments.....	0.0	0.0	0.0	2.0	-2.0	
Cost-of-living adjustments in Federal transfer programs.....	7.6	0.0	0.0	0.5	7.1	
Earned-income credit.....	3.9	0.0	0.0	0.0	3.9	
In personal contributions for social insurance:						
Increase in taxable wage base.....	1.4	0.0	0.0	0.0	1.4	
Change in premium for supplementary medical insurance.....	2.1	0.0	0.0	0.0	2.1	
In personal tax and nontax payments:						
Federal tax law changes.....	-5.2	0.0	0.0	0.0	-5.2	
Refunds and state tax law changes.....	0.0	0.2	1.0	0.1	0.0	

NOTE: Most dollar levels are in NIPA table 2.1.
IVA Inventory valuation adjustment
CCAAdj Capital consumption adjustment

Chart 3. Selected Personal Income and Saving Measures

